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U.S. Department of the Interior
Bureau of Land Management
Kremmling Field Office
P.O. Box 68
Kremmling, CO 80459

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-120-2007-41-EA

PROJECT NAME: Little hO Logging Roads

LEGAL DESCRIPTION: T. 1N., R. 76W., Section 1: Lots 5,11,12,13
T. 2N., R. 76W., Section 23: SWNE, SENW, SE

APPLICANT: Little hO Ranch, LLC

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction/Issues and Concerns: Over the last several years, Grand County has sustained heavy mortality within lodgepole pine from a mountain pine beetle (MPB) infestation. Federal, state and local agencies, along with private landowners, have been cutting and removing infested trees in an attempt to reduce the amount of MPB attacks in lodgepole pine to improve forest health and to reduce the amount of fuels that contribute to undesirable wildfire behavior.

Little hO Ranch has logging contractors currently removing infested lodgepole pine from their private property and would like to access two isolated parcels to continue removing infested trees.

PROPOSED ACTION: The Little hO Ranch has applied for a right-of-way (ROW) to improve an existing access road (southern road) and construct a new access road (northern road) across public land from their main ranch property to their two isolated private parcels. These properties are separated from the ranch by public and other privately owned land (see Attachment #1 for project maps). The purpose of the roads would be to access their private parcels to salvage the dead timber.

For the southern road, Little hO Ranch proposes to use an existing two track road to provide access to their private property. The existing two-track crosses Strawberry Creek, and the beginning of this road crosses an area of potential wetlands for approximately 200-400 feet. Fabric and fill material would be placed in order to traverse this area and three 12 inch culverts would be installed in existing small drainages. A 24 inch culvert would be installed to cross Strawberry Creek and removed after logging was complete. There is adequate fill material on the ranch that could be used for the creek crossing. Some minor grading would be needed to

balance the road prism cross slope. The contractor would cut into the road bank approximately 6 feet and remove approximately 1-1 ½ feet of fill for a minor realignment needed at the approach to Strawberry Creek in order to cross the creek at a right angle. The road is approximately 4200 feet long with a driving surface of 14 feet wide. The total width of the ROW would be 30 feet encompassing 2.89 acres of public land. After logging is completed, the culvert in Strawberry Creek would be removed but the culverts, fabric and gravel in the wetlands would not be removed.

For the northern road, Little hO Ranch proposed to construct a new road to provide access to their private property. The northern road would be approximately 3200 feet in length, and the driving surface would be 14 feet wide. The total width of the ROW would be 30 feet encompassing 2.20 acres of public land. Little hO has tried to access this property through private land easements but the cost was too prohibitive. There are no live streams but 4 or 5 culverts would be installed in existing draws. Trees would need to be removed and purchased before excavation. A D-5+ cat would be used to construct the road. The road location would follow existing contours throughout much of its length with occasional short pitches coming out of draws. Road grade would not exceed 6-8% grade in any location.

The issuance of the ROW would be contingent upon the applicant completing the Army Corps of Engineers 404 permit process (for the southern road) and the EPA stormwater II permit process (for both roads). After logging would be completed, the roads would continue to be used as access roads to Little hO's private parcels.

NO ACTION ALTERNATIVE: The No Action Alternative would be denial of the ROW request and Little hO's logging contractor would not be able to access their private land through BLM-administered public lands. The private parcel to the south is surrounded by BLM land and therefore logging could not occur. The private parcel to the north would have to be accessed through other private parcels which at this time would not grant access.

PURPOSE AND NEED FOR THE ACTION: The BLM is specifically responding to a ROW application from Little hO Ranch to improve an existing road and construct a new road to access their isolated private parcels for the purpose of removing dead MPB trees. The ranch believes there is a need for the access and removal due to the catastrophic danger of wildfire in the area. They also have a need to go through the BLM-administered public lands because the southern parcel is surrounded by BLM lands and they have been unable to gain a private land easement to access the northern parcel.

The BLM is considering the application because it would provide Little hO Ranch the opportunity to utilize its private land and reduce the risk of wildfire in the project area. The BLM has also had positive talks with the owners about BLM using these access roads for timber removal on BLM lands in the future. The BLM has access needs in the area to reach public lands that have been infested with MPB.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

> Name of Plan: Kremmling Resource Management Plan (RMP), Record of Decision (ROD)

Date Approved: December 19, 1984; Updated February 1999

Decision Number/Page: II-B-12 pg. 14

Decision Language: Provide the opportunity to utilize public lands for development of facilities which benefit the public, while considering environmental and agency concerns.

Standards for Public Land Health: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. The following are the approved standards:

Standard	Definition/Statement
#1 Upland Soils	Upland soils exhibit infiltration and permeability rates that are appropriate to soil type, climate, land form, and geologic processes. Adequate soil infiltration and permeability allows for the accumulation of soil moisture necessary for optimal plant growth and vigor, and minimizes surface runoff.
#2 Riparian Systems	Riparian systems associated with both running and standing water, function properly and have the ability to recover from major surface disturbances such as fire, severe grazing, or 100-year floods. Riparian vegetation captures sediment, and provides forage, habitat and bio-diversity. Water quality is improved or maintained. Stable soils store and release water slowly.
#3 Plant and Animal Communities	Healthy, productive plant and animal communities of native and other desirable species are maintained at viable population levels commensurate with the species and habitat's potential. Plants and animals at both the community and population level are productive, resilient, diverse, vigorous, and able to reproduce and sustain natural fluctuations, and ecological processes.
#4 Threatened and Endangered Species	Special status, threatened and endangered species (federal and state), and other plants and animals officially designated by the BLM, and their habitats are maintained or enhanced by sustaining healthy, native plant and animal communities.
#5 Water Quality	The water quality of all water bodies, including ground water where applicable, located on or influenced by BLM lands will achieve or exceed the Water Quality Standards established by the State of Colorado. Water Quality Standards for surface and ground waters include the designated beneficial uses, numeric criteria, narrative criteria, and anti-degradation requirements set forth under State law as found in (5 CCR 1002-8), as required by Section 303(c) of the Clean Water Act.

Because a standard exists for these five categories, a finding must be made for each of them in the environmental analysis. These findings are located in specific elements below or in the Interdisciplinary Team Analysis Review Record and Checklist (IDT-RRC) (Appendix 1).

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

CRITICAL ELEMENTS: The following critical elements: Air Quality, Areas of Critical Environmental Concern, Cultural Resources, Native American Religious Concerns, Environmental Justice, Farmlands- Prime and Unique, Wastes, Hazardous or Solid, Wild and Scenic Rivers, and Wilderness were evaluated and determined that they were not present or that there would be no impact to them from the Proposed Action or No Action Alternative. See IDT-RRC in Appendix 1 for further information.

The following critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

There would be no impacts from the No Action Alternative for a majority of resources and uses. However, potential impacts are discussed in certain sections (i.e. migratory birds and water quality).

FLOODPLAINS

Affected Environment: The proposed southern road is outside of Strawberry Creek's floodplain, except at the stream crossing. The small creek would naturally have high flows from snowmelt and taper off to a few cubic feet/sec (cfs) in late summer to fall. The Vail ditch, however, releases water from Meadow Creek Reservoir into an upper reach of Strawberry Creek. The water is generally released from June through the first week in October, but during dry years it may start in May. In the last 14 years, the shortest period was in 1999 when this supplemental water ran from June 4th to July 22nd. The longest period was 151 days in 2001 and again in 2002, from May 17th to October 14th. At the Vail Ditch #2 headgate, located below the proposed stream crossing, average July- September flows range from less than 3 cfs to 45 cfs. Generally by the third week in July the flows are below 20 cfs.

Environmental Consequences: The proposed crossing is located on a straight run, just below a fairly stable flat reach that is currently used as a ford. Due to the large range in flows and the diverted water in Strawberry Creek, it is important that any proposed stream crossing is well designed to avoid direct (i.e. surface disturbance from logging trucks) and indirect (i.e. future high flows washing out the culvert and access road) impacts to the floodplains.

Once the proposed logging has finished and the culvert is removed, the applicant has stated that they would access their private property by fording the stream at the proposed location. An unimproved stream crossing is not considered a best management practice if frequent access is desired. Thus, there is a potential for indirect impacts to the floodplain from future vehicle use from the applicant.

The following mitigation is proposed to account for the large range in flows and uncertainty associated with the timing of the flows.

Mitigation:

-The proposed 24 inch culvert should only be installed once the streamflow is less than 3 cfs, or else the culvert size needs to be adjusted to the current flows.

-Installation of the culvert should be done with the minimal bank and bed disturbance possible.

-Since the Proposed Action is not analyzing an improved stream crossing for future use, monitoring of the crossing is recommended. If the crossing is rutted, or is causing widening of the creek, or downstream erosion, or other resource damage, then an improved crossing would be required.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: Currently, few invasive, non-native species are growing within the project area. However, any ground disturbing activity, such those associated with Proposed Action, creates an avenue for the establishment and/or expansion of invasive, non-native species.

Environmental Consequences: Since construction equipment is a common pathway for the importation of noxious weed seeds into an area, mitigation is proposed to reduce the potential for direct impacts. The BLM would monitor the project area for the establishment or spread of invasive, non-native species after the project is completed. If invasive, non-native species become established or spread as a result of the Proposed Action; Little hO would be responsible for their control.

Mitigation:

-Construction equipment should be cleaned prior to entering the project area.

MIGRATORY BIRDS

Affected Environment: The proposed project area supports a number of migratory bird species including red-tailed hawks, goshawks, Clark's nutcrackers, Black capped chickadees, Steller's jays, Hairy Woodpeckers, Yellow-rumped warblers, and Northern Flickers. Few ground nesting birds inhabit the project area due to the lack of ground vegetation. The closed canopy existing in the project area has prevented grass, forb, and shrub establishment which would provide food and nesting cover for ground nesting species.

Environmental Consequences/Mitigation: Migratory birds inhabiting the proposed project area would likely move from the area during road construction and subsequent timber harvest activities on private land. This displacement would be short term since the proposed activities are expected to take only 30-50 days. Some nest trees could be removed by the proposed project, however, a sufficient number of trees would remain to provide nesting habitat for birds. The proposed project would benefit some ground nesting species since the harvest on private land would open the forest canopy and allow grasses, forbs, and shrubs to establish. Additional food and cover for ground nesting species would be added to the treated areas by tree removal.

The No Action alternative would deny access to private land and no timber harvest would occur. The structure of the vegetation in the project area would not change and the area would become

more susceptible to a large-scale wildfire. This could result in a long-term change in the habitat which could adversely impact some tree nesting species since fire would likely remove more trees than the proposed harvest project. With the No Action alternative, ground vegetation would decrease in the closed canopy forest habitat and could continue to preclude some migratory bird use of the proposed project area.

THREATENED, ENDANGERED, AND SENSITIVE SPECIES (includes a finding on Standard 4)

Affected Environment: Threatened, endangered and candidate species, which could inhabit the proposed project area, were addressed in a Biological Assessment (BA), which is on file in the Kremmling Field Office. This BA determined the proposed project "may affect but is not likely to adversely affect" Canada lynx on the proposed south road. Since the Kremmling Field Office has implemented the Counterpart Regulations, it was not necessary to present this BA to the U.S. Fish and Wildlife Service (FWS) for concurrence. The newly implemented Counterpart Regulations eliminates the need for the U.S. Fish and Wildlife Service to concur in writing with the "may affect but not likely to adversely affect" determination.

The proposed project is located in the Fraser Lynx Analysis Unit (LAU) which includes 95,917 acres of National Forest land, 6,675 acres of BLM-administered public land, 10,961 acres of the Arapaho National Recreation Area (ANRA), 11,795 acres of private lands and 1,178 acres of State lands. This LAU adjoins four other LAU's; Upper Colorado LAU, Boulder LAU, Williams Fork LAU and the Clear Creek LAU (see Fig. 2.). The table below summarizes the acres of lynx habitat in the Fraser LAU.

Table 1 - Acres of lynx habitat, Fraser Lynx Analysis Unit

Habitat type	**Acres USFS**	**Acres BLM**	**Acres ANRA**	**Acres Private**	**Acres State**	**Percent BLM of total lynx habitat in LAU**
Denning	40587	19	4812	216	58	.02
Winter foraging	23024	1541	4095	611	471	1.8
Other	2887	2875	637	528	2	3.4
Unsuitable	2672	0	380	16	0	0
Total	**69170**	**4435**	**9924**	**1371**	**531**	**85,431 acres habitat 5.2% is BLM**

The Proposed Action would involve the salvage cutting of approximately 250 acres of lodgepole pine. Of these, 83 acres are designated winter lynx habitat and 86 acres are designated other lynx habitat. Based on field visits most of the dominate vegetation is mature lodgepole pine with little to no vegetative ground cover or woody debris. Thus, most if not all the project area should be classified as "Other" habitat. If lynx are present in Fraser LAU, their use of the project area would likely be limited to travel through the area during summer and fall.

Environmental Consequences/Mitigation: The effects analyzed below deal primarily with the subsequent harvesting activities on private land. This proposed activity is not included

in the Proposed Action of this EA, rather the EA is analyzing the effects of authorizing the ROW. However, the Endangered Species Act requires the BLM to consult with the FWS on the issuance of access permits concerning subsequent activities and effects to listed species on non-Federal land.

The evaluation of the effects of the project on lynx is assessed with respect to relevant project standards and conservation measures recommended in the Canada Lynx Conservation Assessment and Strategy (Ruedinger et al. 2000), primarily maintaining and improving suitability of the "Other" lynx habitat category. The "Other" designation was assigned to the proposed project area during lynx habitat mapping efforts by BLM and was added to the U.S. Forest Service Fraser LAU. The following is a summary of the BA.

The following summarizes the potential direct impacts. Since actual use of the proposed project area by Canada lynx has not been documented by Colorado Division of Wildlife, the project should not result in direct mortality of individual lynx. Lynx could be displaced by timber harvest activities if lynx inhabit the project area at the time of harvest. The project area could be used by lynx for hunting and travel during late summer and fall. Any effects to lynx would be the result of changes in vegetative structure within the treatment units. Although beetle infested trees would be removed as a result of the proposed project, the number of trees which would remain after harvest would be sufficient to provide cover for lynx moving through or hunting in the project area.

The following summarizes the potential indirect impacts. Pine squirrels could temporarily decrease in the project timber cut units as result of lodgepole pine tree removal, however, a sufficient number of trees would remain to support the numbers of pine squirrels necessary to sustain a viable population over time. Pine squirrels can provide a food source for Canada lynx if snowshoe hares are not available. Since the project area currently lacks understory vegetation, the proposed timber removal would result in a more open forest canopy which would allow ground vegetation to establish and maybe flourish until the lodgepole canopy would close and again eliminate this layer. In addition, young, vigorous lodgepole pine would establish in the treated areas, likely within 10-15 yrs. This vegetation would provide more cover for lynx and more food and cover for prey species including snowshoe hares. Timber harvest would also result in some woody material on the ground, some coarse and some fine, as a result of slash disposal. Ground level woody material would provide cover for small mammals which is currently non-existent in the proposed harvest units. This cover could make additional prey available for Canada lynx.

The following summarizes the potential cumulative impacts. Although private and USFS lands adjoin the proposed project area, none of the timber harvest activities which have been completed or are planned for the near future would downgrade the "Other" lynx habitat category to unsuitable. Numerous acres of "Other" lynx habitat, denning habitat, and winter foraging habitat are available to lynx within the Fraser LAU. No future projects which would downgrade any of these lynx habitat types are likely to occur in the future. As a result of these factors, the proposed project would not cause cumulative effects which would be adverse to Canada lynx within the Fraser, adjoining LAU's or on adjoining private and USFS land.

Finding on the Public Land Health Standard for Threatened & Endangered species: The project area has not been assessed for compliance with the Standards for Public Land Health in Colorado, however, neither the Proposed Action nor the No Action Alternative are expected to prevent this allotment from meeting this standard.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: The proposed north road is within the Headwaters of the Colorado River 5th Order Watershed. Any runoff from the road would travel to the northeast towards Walden Hollow, which is a perennial drainage tributary to the Colorado River. The Walden Hollow area consists of irrigated meadows and runoff from the road would be expected to be caught in the ditches and not reach surface waters. The south road is located within the Fraser River 5th Order watershed. Runoff from this road would be tributary to Strawberry Creek, which is tributary to the Fraser River. The three streams are all designated by the state for Coldwater-class 1 fishery, Recreation- class 1a, Water Supply, and Agriculture uses. The streams are considered to be fully supporting these designated uses and have not been listed for water quality impairment. Due to the limited access and ownership, water quality data is limited on the BLM portion of the Strawberry Creek, and no other sampling has been done. When field parameters have been measured, water quality has been very good. A survey from 1979 found a brook trout and sculpin fishery. Below Headgate #2, Strawberry is often totally dry during the irrigation season, as the diversion takes all the water. Ditch seepage and irrigation return flows return to this lower portion of the creek, but at least during the irrigation season, the creek is "cut off" from the Fraser River below.

The South road's initial segment crosses a wet meadow that could be fed by seeps or simply a seasonal water table due to the area's snowpack. The vegetation in the meadow is not entirely wetland species (obligate). There are no other known or possible ground water occurrences along the proposed roads.

Environmental Consequences/Mitigation: The proposed roads each represent a surface disturbance of over 1 acre, and will require a NPDES permit under the EPA's NPDES Stormwater Program, unless an exemption can be obtained by the applicant. Exemptions are based on rainfall erositivity in an area during the expected construction period. The applicant initially stated that the south road was proposed for timber purposes only, which are exempt from the NPDES process. Since the applicant intends to use the proposed road to access their private property, the exemption no longer applies and a NPDES permit to cover the planned construction is required.

The applicant would use best management practices identified in their ROW application and their NPDES permit to reduce erosion and runoff from the roads, especially during construction phases. The practices that pertain to this right-of-way are:

- constructing the roads during dry soil conditions
- avoiding steep road grades (below the maximum of 10%)
- installing adequate cross drains, with outlets onto well vegetated (or riprapped) areas.
- maximum of 2:1 slopes for cut and fill
- roads follow the contour with a vegetative buffer between road and streams
- seeding all disturbed areas

- filter cloth, gravel surfacing, and culverts to cross wet meadow area

These practices would reduce the possible sediment load that would reach surface waters, and protect surface water quality. The placement of filter cloth, gravel, and culverts in the meadow area also protect any possible ground water sources.

Under the No Action Alternative, the northern area would not have vehicle access. Timber management on the BLM lands would not be pursued, increasing wildfire risks. The south road would not be improved, although some use would continue. The road would continue to cross the meadow area and the creek with administrative and/or private use. The opportunity to reduce wildfire hazards adjacent to Strawberry Creek would not be pursued.

Finding on the Public Land Health Standard for water quality: The Proposed Action, with best management practices, would not impact the area's ability to continue to meet this standard. The applicant's logging of dead trees would help reduce wildfire hazards, which also would help protect the water quality. Under the No Action Alternative, there would be no predictable impacts to water quality.

WETLANDS & RIPARIAN ZONES (includes a finding on Standard 2)

Affected Environment: The North road would be located across an upland hillside and would not directly or indirectly affect any known wetland or riparian areas. The South road is planned to occur on an existing two track that parallels the Strawberry Creek riparian zone, with one creek crossing. Strawberry Creek supports a 50-300 foot wide riparian area with an alder/willow overstory. The upper portion of the BLM segment is in a wide valley and there are several beaver ponds in the channel. Lower in the channel, near the road crossing, the valley narrows and the stream gradient increases. The initial portion of the road cuts through a wet meadow that, at least seasonally, has three drainages crossing the road to the creek. The meadow does have some hydric plant species and appears to be a wetland. There are a few areas where the existing road is rutted crossing the meadow.

Environmental Consequences/Mitigation: The applicant's initial intent of using the improved South road solely for timber practices exempted the road from needing a Section 404 permit from the Army Corps of Engineers. The exemption (33 CFR 323.4) still requires that Colorado's BMPs be followed and follow baseline provisions. The provisions that pertain to this right-of-way are:

- minimizing the road size and associated disturbance
- crossing streams so that flood flows are not restricted
- stabilizing all fill to prevent erosion,
- minimizing trucks or heavy equipment within the waters of the U.S. (and adjacent wetlands).
- not disrupting aquatic species movements by culvert location/installation
- obtaining borrow material from an upland source

The state's BMPs are summarized in the water quality section and would also be included in the NPDES permit. If conditions are not followed, the violation falls under EPA purview (EPA has responsibility for enforcement in non-permit situations).

Under the No Action Alternative, the applicant could continue to access their private property using the existing road. This use would continue to rut the meadow, and would not provide the proposed improvements that would help minimize vehicle impacts. The applicant also would not be responsible for an improved stream crossing if resource damage was occurring from the unimproved low water crossing.

Finding on the Public Land Health Standard for riparian systems: The Proposed Action, with mitigation, would improve the existing conditions across the BLM's meadow area. The proposed North road would have no impact on wetlands or riparian areas.

NON-CRITICAL ELEMENTS: The following non-critical elements were determined to be potentially impacted and were carried forward for analysis from the IDT-RRC in Appendix 1.

SOILS (includes a finding on Standard 1)

Affected Environment: Soil information is from the Grand County Soil Survey and due to the scale, the site specific soils may vary from the survey. The survey does give an indication of the types of soils the proposed roads would cross. The survey maps the North road as crossing the Uinta sandy loam, 15-50% slopes soil mapping unit. The forest soil has low to moderate runoff amounts as the soils formed in glacial drift and weathered metamorphic rocks. The duff is underlain by sandy loams and sandy clay loams with moderate permeability. The soils are not considered highly erodible.

The South road crosses Cimarron loams, 6-15% slopes in the meadow area, before also crossing Uinta sandy loams in the forested road segment. The road then drops down closer to Strawberry Creek and is mapped as being within the floodplain and Cumulic Cryaquoll soils for about 440 feet. During the field exam, it appears that although the road is just adjacent to the floodplain, it is outside until the actual stream crossing and approaches. The south side of the creek is mapped as being in Scout cobbly sandy loams, 15-65% slopes. These soils formed in glacial drift and colluvium, and have very cobbly sandy loam surface textures below the duff layer. Permeability is moderately rapid and low to moderate runoff. The soil is considered highly erodible by wind erosion.

Environmental Consequences: There is a potential for direct and indirect impacts in the form of erosion due to the steep slopes and potential for runoff. The North road has a north to northeast aspect, which would accumulate snow during the winter months. Drainage for the road should be sized for snowmelt events and travel should occur during dry soil conditions. The proposed road contours the slope and avoids steep grades, reducing potential erosion concerns. The South road also should have adequate drainage to reduce runoff travel down the road surface. The following mitigation is proposed to reduce the potential impacts from runoff:

Mitigation:

-Drainage outlets should be placed to reduce outflow eroding the ground surface.

-The roads' cut and fill slopes should be no more than 2:1 and construction should occur during periods of dry soils.

-Vegetative disturbance should be minimized and all disturbed areas seeded.

-If all weather travel is desired, then gravel surfacing should be added to the road.

Finding on the Public Land Health Standard for upland soils: The project area has not been assessed for compliance with the Standards for Public Land Health in Colorado, however, neither the Proposed Action nor the No Action Alternative are expected to prevent this allotment from meeting this standard.

VEGETATION (includes a finding on Standard 3)

Affected Environment: The proposed project area runs through a variety of high quality native vegetation communities. The meadow areas are a mixture of grasses, grasslike plants such as rushes and sedges, and a wide variety of forbs. Shrubs such as potentilla, sagebrush and Wood's rose are interspersed within the plant community. The forested areas are predominantly lodgepole pine and aspen. Mountain pine beetle (MPB) is at epidemic levels in the lodgepole pine throughout central Colorado. Large numbers of pine trees are either dead or highly susceptible to attack by MPB. The forested areas have an understory of grasses and forbs with only scattered shrubby species. Creeping juniper is the main shrub found within the forested areas.

Environmental Consequences/Mitigation: The Proposed Action would cause major direct impacts in the form of disturbances to the vegetation in those areas affected by the road construction. However, the disturbed areas would be linear and narrow and should not cause any major direct impact on the overall vegetation in the vicinity of the roads. All areas requiring reseeding would use certified weed free seed and a seed mix and seeding rate authorized by the BLM.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The project area has not been assessed for compliance with the Standards for Public Land Health in Colorado, however, neither the Proposed Action nor the No Action Alternative are expected to prevent this allotment from meeting this standard.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: The proposed project area provides coniferous habitat for a variety of birds and mammals. Rocky Mountain elk, mule deer, moose, and black bears are found in the project area during various times of the year. Use of the area by these species is common during spring, summer, and fall. Winter use is dependent on snow depth and is more common during years of shallow snow depth for deer and elk. However, moose can use the area during winters of deep snow. Small mammals, including pine squirrels and pine marten, inhabit the area on a yearlong basis.

The project area lacks a sufficient vegetative understory to support a large number of large and small wild animals. The closed canopy, characteristic of the older lodgepole stands in the area, has blocked understory growth to the extent that ground cover vegetation is sparse in the areas proposed for timber harvest.

Environmental Consequences/Mitigation: Wildlife species using the project area would likely move during road construction and timber harvest activities. However, these animals would use adjacent undisturbed habitat and would most likely return to the project area following completion of harvest. This displacement would be short term since the proposed harvest is expected to take only 30-50 days.

The proposed roads would benefit wildlife in the area by permitting access to land that would be harvested and thereby open the closed forest canopy. Opening the canopy would facilitate

understory vegetation by allowing sunlight and moisture to reach the ground. A substantial increase in ground vegetation would be anticipated after timber harvest, resulting in more cover and food for ground dwelling birds and mammals.

The No Action alternative would deny access to private land and no timber harvest would occur. The structure of the vegetation in the project area would not change and the area would become more susceptible to a large-scale wildfire. This could result in a long-term change in habitat on a large scale, which for the short term, would be detrimental to most species dependent on lodgepole pine forest. With the No Action alternative, ground vegetation would continue to decrease in the closed lodgepole canopy. Wildlife use of the area could decrease since less cover and food would be available.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The project area has not been assessed for compliance with the Standards for Public Land Health in Colorado, however, neither the Proposed Action nor the No Action Alternative are expected to prevent this allotment from meeting this standard.

PALEONTOLOGICAL RESOURCES

Affected Environment: The south road is underlain by by Precambrian gneiss and Proterzoic biotite schist. These are evaluated as: "Class IV-Fossils are not known for these geologic units and there is little likelihood for their occurance." The north road is underlain by modern and older gravels and alluvium, and older glacial drift deposits. These are evaluated as "Class II-Fossils of scientific significance are occasionally found in the formation within the Craig district." Additionally, there may be some Troublesome formation deposits at the western end of the north road. The Troublesome formation is classified as "Ia- Fossils of scientific significance are known to be abundant in the formation within the Craig District".

Environmental Consequences: Due to the geologic formations along the southern road, there would likely be no impacts to fossils. However, due to the presence of the Troublesome formation along portions of the north road, there is a potential for direct impacts to fossils. See proposed mitigation below.

Mitigation:

-The north road would require a paleontological inventory prior to construction, and monitoring during and after construction.

-The staff paleontologist should be notified by the project proponent a minimum of 10 days in advance of construction, and provide access across private property so that an inventory can be completed. If significant fossil resources are discovered, it may be necessary to modify the road alignment or otherwise make provision for protecting or recovering the fossil resources. The staff paleontologist would monitor construction during and after construction.

CUMULATIVE IMPACTS SUMMARY: The area considered for analyzing the incremental effect of the Proposed Action when added to other past, present, and reasonably foreseeable future actions is the east end of Grand County. While the boundaries for cumulative impact

analysis will vary for different resources and activities, this area was considered appropriate for all resources and uses.

In regards to past actions, there have been numerous treatment methods taking place on federal (i.e. Forest Service), state, and private land. Treatments have ranged from ranged from applying insecticides to protect healthy trees to cutting and removing infested trees using traditional ground-based logging methods. The BLM has approved several small salvage sales (i.e. 80 – 100 acres) on BLM-administered public lands in east Grand County over the last five years. The Arapaho and Roosevelt National Forests have also initiated a number salvage and forest health projects over the last five years to remove infested trees. There has also been numerous private land owners who have been treating there private property. The acreage figures for the treated private land are difficult to estimate.

In regards to present and future actions, the BLM does not have any other treatment projects taking place. The BLM recently approved a categorical exclusion for a salvage sale of approximately 70 acres. However, the private landowner who expressed interest in the project has since declined. The BLM is also looking at potential future sites in east Grand County but does not have any firm proposals. The Forest Service has on-going treatment activities taking place and is currently analyzing additional treatments (see Forest Service Schedule of Proposed Actions (SOPA) for activities from July 1, 2007 through September 30, 2007). It is reasonably certain that private landowners will continue to treat their private land in an attempt to reduce the risk of catastrophic wildfire.

When considering the cumulative impacts from the Proposed Action, when combined with these other past, present, and reasonably foreseeable actions, there would only be minor beneficial cumulative impacts to forest health. The treated areas represent a small fraction of the overall infested forested acres which are still highly susceptible to a catastrophic forest fire. The two proposed roads would not be accessible by the public and therefore would not increase the traffic in the area and new routes would not be created off of the proposed roads. The BA and Threatened and Endangered species section above discuss the minimal cumulative impacts that would occur to the Canada lynx. Thus, the direct and indirect, and cumulative impacts that would result from the Proposed Action would be minimal.

PERSONS / AGENCIES CONSULTED: Bill Gherardi, Woodland Management Consultants, LLC, Nicholas Mezei, Corps of Engineers, Frisco Regulatory Office

INTERDISCIPLINARY REVIEW: See IDT-RRC in Appendix 1.

FONSI

CO-120-2007-41 EA

Based on the analysis of potential environmental impacts contained in the attached environmental assessment, and considering the significance criteria in 40 CFR 1508.27, I have determined that the Proposed Action will not have a significant effect on the human environment. An environmental impact statement is therefore not required.

DECISION RECORD

DECISION: It is my decision to authorize the Proposed Action as described in the attached EA. This decision is contingent on meeting all mitigation measures and monitoring requirements listed below.

RATIONALE: The decision to grant Little hO Ranch a right-of-way was based upon a thorough analysis by the BLM Interdisciplinary Team. The BLM considered a number of factors such as impacts to air quality, water quality, threatened, endangered, and sensitive species, and soils. These impacts will be mitigated through implementation of the mitigation measures below.

The Proposed Action is in conformance with the Kremmling Resource Management Plan which directs the BLM provide the opportunity to utilize public lands for development of facilities which benefit the public, while considering environmental and agency concerns. A right-of-way for access roads will not only assist the landowner, but will also help manage the hazardous fire threat to the residences, adjacent private lands, and public land.

MITIGATION MEASURES:

Cultural:

The Purchaser is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for disturbing historic or archaeological sites, or for collecting artifacts.

The Purchaser shall immediately bring to the attention of the Authorized Officer any and all antiquities, or other objects of historic, paleontological, or scientific interest including but not limited to, historic or prehistoric ruins or artifacts DISCOVERED as a result of operations under this authorization (16 U.S.C. 470.-3, 36 CFR 800.112). The Purchaser shall immediately suspend all activities in the area of the object and shall leave such discoveries intact until written approval to proceed is obtained from the Authorized Officer. Approval to proceed will be based upon evaluation of the object(s). Evaluation shall be by a qualified professional selected by the Authorized Officer from a Federal agency insofar as practicable (BLM Manual 8142.06E). When not practicable, the Purchaser shall bear the cost of the services of a non-Federal professional.

- Within five working days the Authorized Officer will inform the Purchaser as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the Purchaser will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and,
- A timeframe for the Authorized Officer to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the Authorized Officer are correct and that mitigation is appropriate.

If the Purchaser wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the Purchaser will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the Purchaser will then be allowed to resume construction.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest that are outside of the authorization boundaries but directly associated with the impacted resource will also be included in this evaluation and/or mitigation.

Antiquities, historic, prehistoric ruins, paleontological or objects of scientific interest, identified or unidentified, that are outside of the authorization and not associated with the resource within the authorization will also be protected. Impacts that occur to such resources, which are related to the authorizations activities, will be mitigated at the Purchaser's cost.

Pursuant to 43 CFR 10.4(g), the Purchaser of this authorization must notify the authorized officer, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

Floodplains:

-The 24 inch culvert must be installed in Strawberry Creek once the streamflow is less than 3 cfs, or else the culvert size needs to be adjusted to the current flows. Flows can be determined by calling Neil Misbach, Division Water Commissioner, at 970-726-4267. BLM can then advise the holder of the correct culvert size.

-Installation of the culvert must be done with the minimal bank and bed disturbance.

Invasive/Non-native species:

-Construction equipment must be cleaned prior to entering the project area.

Soils:

-Drainage outlets must be placed to reduce outflow eroding the ground surface.

-The roads' cut and fill slopes must be no more than 2:1 and construction must occur during periods of dry soils.

-Vegetative disturbance must be minimized and all disturbed areas seeded.

-If all weather travel is desired, then gravel surfacing must be added to the road.

Paleontology:

-The north road will require a paleontological inventory prior to construction, and monitoring during and after construction.

-The staff paleontologist must be notified by the project proponent a minimum of 10 days in advance of construction, and provide access across private property so that an inventory can be completed. If significant fossil resources are discovered, it may be necessary to modify the road alignment or otherwise make provision for protecting or recovering the fossil resources. The staff paleontologist will monitor construction during and after construction.

COMPLIANCE/MONITORING: The right-of-way will be inspected and monitored periodically during terms of the grant to ensure compliance with the terms and conditions of the grant. The right-of-way will also be inspected after any maintenance activities to determine compliance with and effectiveness of reclamation measures.

Floodplains:

-Since the Proposed Action is not analyzing an improved stream crossing for future use, monitoring of the crossing will occur. If the crossing is rutted, or is causing widening of the creek, or downstream erosion, or other resource damage, then an improved crossing will be required.

NAME OF PREPARER: Susan Cassel

NAME OF ENVIRONMENTAL COORDINATOR: Joe Stout

DATE: 7/23/07

SIGNATURE OF AUTHORIZED OFFICIAL: /s/ David Stout

DATE SIGNED: 7/25/2007

ATTACHMENTS:

1). Project Map
2). Stipulations

APPENDICES:

Appendix 1 – Interdisciplinary Team Analysis Review Record and Checklist

Appendix 1

INTERDISCIPLINARY TEAM ANALYSIS REVIEW RECORD AND CHECKLIST:

Project Title: Little hO Ranch Logging Roads
Project Leader: Susan Cassel
Date Submitted for Comment: 6/14/07
Due Date for Comments: 7/5/07

Need for a field Exam: Yes, completed 6/12/07

Scoping Needs/Interested or Affected Publics: See Persons/Agencies consulted section.

Consultation/Permit Requirements:

Consultation	Date Initiated	Date Completed	Responsible Specialist/ Contractor	Comments
Cultural/Archeological Clearance/SHPO	5/29/07	6/18/07	B.Wyatt	A cultural resource inventory (Report #CR-07-40) was conducted and located no new historic properties.
Native American	5/25/07	6/25/07	B.Wyatt	Consultation completed and no comments received.
T&E Species/FWS	6/22/07		M. McGuire	Initiated Counterpart Regulations. See EA for more detail.
Permits Needed (i.e. Air or Water)	6/12/07		P. Belcher	Applicant responsible for obtaining NPDES permit or waiver.

(NP) = Not Present
(NI) = Resource/Use Present but Not Impacted
(PI) = Potentially Impacted and Brought Forward for Analysis.

NP NI PI	Discipline/Name	Date Review Comp.	Initials	**Review Comments** (required for Critical Element NIs, and for elements that require a finding but are not carried forward for analysis.)
CRITICAL ELEMENTS				
NI	Air Quality **Belcher**	7/11/07	PB	There would be no impacts to Air Quality from the Proposed Action.
NP	Areas of Critical Environmental Concern **Stout**	7/16/07	JS	There are no Areas of Critical Environmental Concern in the proximity of the proposed project area. Thus, there would be no impacts.
NI	Cultural Resources **Wyatt**	6/18/07	BBW	A cultural resource inventory (Report #CR-07-40) was conducted and located no new historic properties. Thus, no historic properties would be affected.
NP	Environmental Justice **Stout**	7/16/07	JS	According to the most recent Census Bureau statistics (2000), there are no minority or low income communities within the Kremmling Planning Area. Thus, there would be no impacts.

NP	Farmlands, Prime and Unique **Belcher**	7/11/07	PB	There are no farmlands, prime or unique, in the proximity of the proposed project area. Thus, there would be no impacts.
PI	Floodplains **Belcher**	7/11/07	PB	See analysis in EA.
PI	Invasive, Non-native Species **Johnson**	6/18/07	RJ	See analysis in EA.
PI	Migratory Birds **McGuire**	6/22/07	MM	See analysis in EA.
NI	Native American Religious Concerns **Wyatt**	6/25/07	BBW	Of the five federally-recognized Native American tribes contacted, no tribe to date has stated that they have concerns regarding the proposed Little hO roads.
PI	T/E, and Sensitive Species (Finding on Standard 4) **McGuire**	6/22/07	MM	See analysis in EA.
NP	Wastes, Hazardous and Solid **Hodgson**	7/9/07	KH	There are no quantities of wastes, hazardous or solid, located on BLM-administered lands in the proposed project area, and there would be no wastes generated as a result of the Proposed Action or No Action alternative.
PI	Water Quality, Surface and Ground (Finding on Standard 5) **Belcher**	7/11/07	PB	See analysis in EA.
PI	Wetlands & Riparian Zones (Finding on Standard 2) **Belcher**	7/11/07	PB	See analysis in EA.
NP	Wild and Scenic Rivers **Sterin**	7/1/07	BS	A Wild and Scenic River Eligibility Study was completed in March 2007. There are no eligible segments within the project area.
NP	Wilderness **Monkouski**	6/20/07	JM	There is no designated Wilderness or Wilderness Study Areas in the proximity of the proposed project area.
NON-CRITICAL ELEMENTS (A finding must be made for these elements)				
PI	Soils (Finding on Standard 1) **Belcher**	7/11/07	PB	See analysis in EA.
PI	Vegetation (Finding on Standard 3) **Johnson**	6/18/07	RJ	See analysis in EA.
NI	Wildlife, Aquatic (Finding on Standard 3) **McGuire**	6/22/07	MM	Aquatic wildlife using Strawberry Creek would not be impacted. Finding: No impact.
PI	Wildlife, Terrestrial (Finding on Standard 3) **Cesar** **McGuire**	6/22/07	MM	See analysis in EA.
OTHER NON-CRITICAL ELEMENTS				
NI	Access/Transportation **Monkouski**	6/20/2007	JM	Access would be improved to cabins within the private in-holding. Monitoring for new routes from access road would need to occur.
NI	Forest Management **Rosene**	7/2/07	RAR	The proposed roads would provide access to forest lands for mountain pine beetle treatments. There are a small number of trees that would need to be removed along the northern road. However, this would be a minor impact.
NI	Geology and Minerals **Hodgson**	7/9/07	KH	No impacts.
NI	Hydrology/Water Rights **Belcher**	7/11/07	PB	The hydrology issues are addressed in the Floodplains, Water Quality, Wetlands, and Soil sections of this document. There would be no impacts to private water rights from the proposed temporary crossing.
PI	Paleontology **Rupp**	7/20/2007	FGR	See analysis in EA
NI	Noise **Monkouski**	6/20/07	JM	Noise levels would increase over a short period of time during road improvement; however no noticeable impacts would occur due to minimal

				public access and no residences in the area.
NI	Range Management **Johnson**	6/18/07	RJ	The project area is included in livestock grazing allotment # 07519 (Little hO). This allotment is a custodial allotment where the objective is to maintain the existing allotment situation and provide for management opportunities as needs arise with operators/other land use agencies. Currently, livestock grazing is not a major component of the ranching operation. Thus, there would be no impacts.
NP	Lands/ Realty Authorizations **Cassel**	7/6/07	SC	No leases, permits or ROW's are in the location of the proposed project.
NP	Recreation **Monkouski**	6/20/07	JM	No impacts to recreation.
NI	Socio-Economics **Stout**	7/23/07	JS	There would be the potential for minor socio-economic impacts under the No Action Alternative. If the BLM denies the right-of-way, the dead timber would remain on private land posing a greater risk to the adjacent private land in the project area. However, the potential for impacts is minimal.
NI	Visual Resources **Koppa**	7/6/07	JK	The proposed project area is located in an area classified as VRM Class II in the KFO 1984 Resource Management Plan. The objective of VRM Class II is to retain the existing characteristic landscape. The introduction of a new logging road would not be visible from US Hwy 40 and possibly visible from 3 kilometers from US Hwy 34. The road should not attract attention from the casual observer. Thus, there would be no impacts.
PI	Cumulative Impact Summary **Stout**	7/23/07	JS	See analysis in EA
FINAL REVIEW				
	P&E Coordinator **Stout**	7/23/07	JS	
	Field Manager **McFadden**			